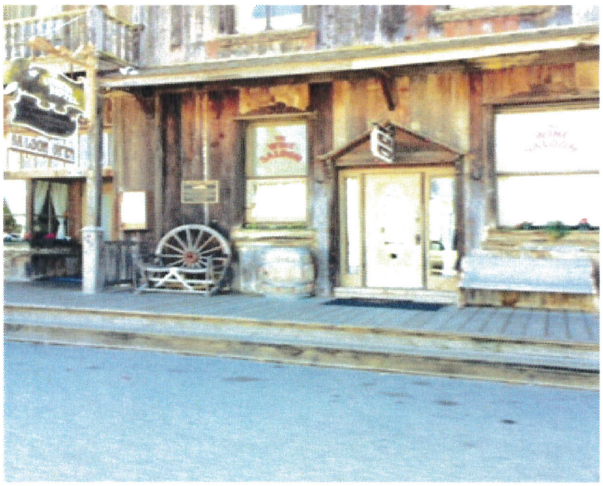
Transportation Concept Report
State Route 135
District 05
May 2016



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California Department of Transportation

Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability

Approvals:

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CHAPTER 1 EXECUTIVE SUMMARY

Caltrans mission is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. Transportation Concept Reports (TCRs) play an active role in achieving this mission to serve the traveling public. TCR is primarily a technical document that: (1) identifies trends and opportunities within a transportation corridor, and (2) provides a basis for considering future actions to preserve the integrity of the corridor over the long-term. This information is valuable to Caltrans and its partners as they consider needs and priorities for future investments.

The TCR is unique and complementary to the Regional Transportation Plan/Metropolitan Transportation Plan – Sustainable Communities Strategy (RTP-SCS or MTP-SCS) developed by Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs). These documents guide decision making in support of transportation facilities that sustain mobility into the future. The technical document focuses on one specific corridor and identifies projected future corridor opportunities. Regional travel demand models from approved RTP/MTP-SCS efforts and Caltrans historic data, provided the basis for the technical analysis presented in this the TCR. These projections forecast future demand on State Route 135 in the 2040 horizon year.

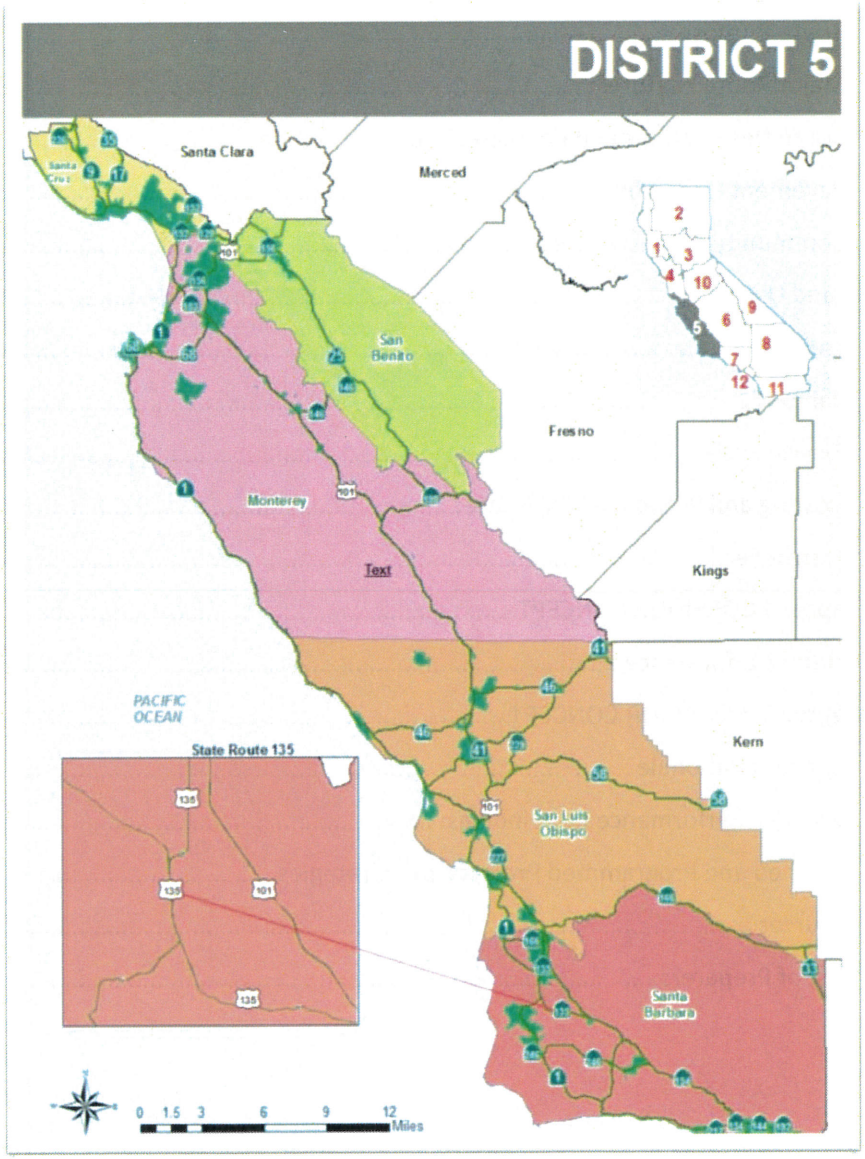

Figure 1:1 District Map

KEY FINDINGS

Caltrans' vision on SR 135 is to maintain existing facility configuration as is with some multimodal improvements.

- There are no bottlenecks on Segment 1 and Segment 2, and congestion is low to moderate at these locations.
- Horizon year (2040): On Segment 3, southbound traffic volumes will exceed capacity between Donovan Road and SR 166.

TABLE 1.1: CORRIDOR CONCEPT

CORRIDOR CONCEPT

Segment	Location Description	County Route Beg. PM	County Route End PM	Existing Facility
1	From U.S 101 to SR 1 (south JCT)	0.00	M11.722	Maintain 2-4 lanes Conventional/Expressway
2	From SR 1 (North JCT) to Santa Maria Way	M11.722	13.00	Maintain 4 lanes Conventional/Freeway
3	From Santa Maria Way to US 101	13.00	17.806	4-6 lanes Conventional highway

Multimodal and Operational Improvements

- Coordinate with the city of Santa Maria, the county of Santa Barbara and SBCAG to Improve bicycle and pedestrian facilities
- Work closely with local jurisdictions, transit agencies, regional and state agencies, and the community to develop cohesive plans for multimodal travel
- Operational improvements at SR 135 and Main Street.
- Improve Truck parking facilities in Los Alamos and Santa Maria

Maintenance and Preservation

- Maintain and preserve pavement conditions throughout the route.

STRATEGIES TO ACHIEVE CONCEPT

Caltrans vision is to provide an integrated transportation system that provides reliable and accessible mobility for all travelers. The following strategies apply to SR 135.

- Since demand is projected to exceed capacity in the Horizon year (2040), additional detailed traffic analysis and evaluation of improvement strategies is recommended
- Recent community planning efforts through the Los Alamos Pedestrian Circulation and Parking Plan identified a need to improve pedestrian and bicycle access along SR 135, and connectivity across US 101 and SR 135. Caltrans supports future capital improvements that are consistent with this planning effort, when possible.
- Coordinate with the city of Santa Maria, the county of Santa Barbara and SBCAG to improve pedestrian and bicycles access along other segments of SR 135.
- Maintain and preserve pavement conditions for all users.
- Work closely with local jurisdictions, transit agencies, regional and state agencies, and the community to develop cohesive plans for multimodal travel and truck facilities.

- Ownership transfer / relinquishment- Segment 3 serves mainly as a local route, hence, the community maybe better served when local agencies take ownership of the route.

STAKEHOLDER PARTICIPATION

Stakeholder participation including both internal and external outreach efforts are essential for developing a Transportation Concept Report (TCR). SBCAG, the metropolitan planning organization for Santa Barbara County and Local agencies are given opportunities to provide comments. Concurrently, Caltrans' internal staff and management reviews occur regularly throughout this document's development. Coordination with our partner agencies include:

TABLE 1.2: STAKEHOLDER PARTICIPATION

Stakeholder Participation	
• SBCAG Technical Advisory Committee meetings	• District 5 circulates the preliminary traffic and planning data sheets and receive initial feedback on the TCR development.
• SBCAG, City of Santa Maria , County of Santa Barbara	• District 5 circulates the draft TCR to the stakeholder agencies' to request input on the TCR and its findings.

CHAPTER 2: CORRIDOR OVERVIEW

ROUTE SEGMENTATION

State Route 135 is a state highway between the towns of Los Alamos, Orcutt and the city of Santa Maria in Santa Barbara County. SR 135 is 21.3 miles in length and transitions between a conventional highway, expressway and freeway. The first 9.6 miles is a 2- lane conventional highway, the next 7.1 miles is 4-lane freeway/expressway, and finally a four and six-lane conventional highway for the remainder of its length. SR 135 begins at the junction of US 101 at Los Alamos, and continues westerly through rolling terrain to Junction (JCT) SR 1, where there is a break in route. It resumes south of Santa Maria and becomes known as Broadway, and continues north through the city of Santa Maria to Junction (JCT) of US 101. SR 135 is a major collector from its southerly junction with US 101 at Los Alamos (P.M. 0.0); from there, it merges with SR 1 JCT (P.M. 11.7). It becomes a 4-lane and 6-lane principle arterial from SR 1 through Santa Maria to its northern junction with US 101 (P.M 17.8).

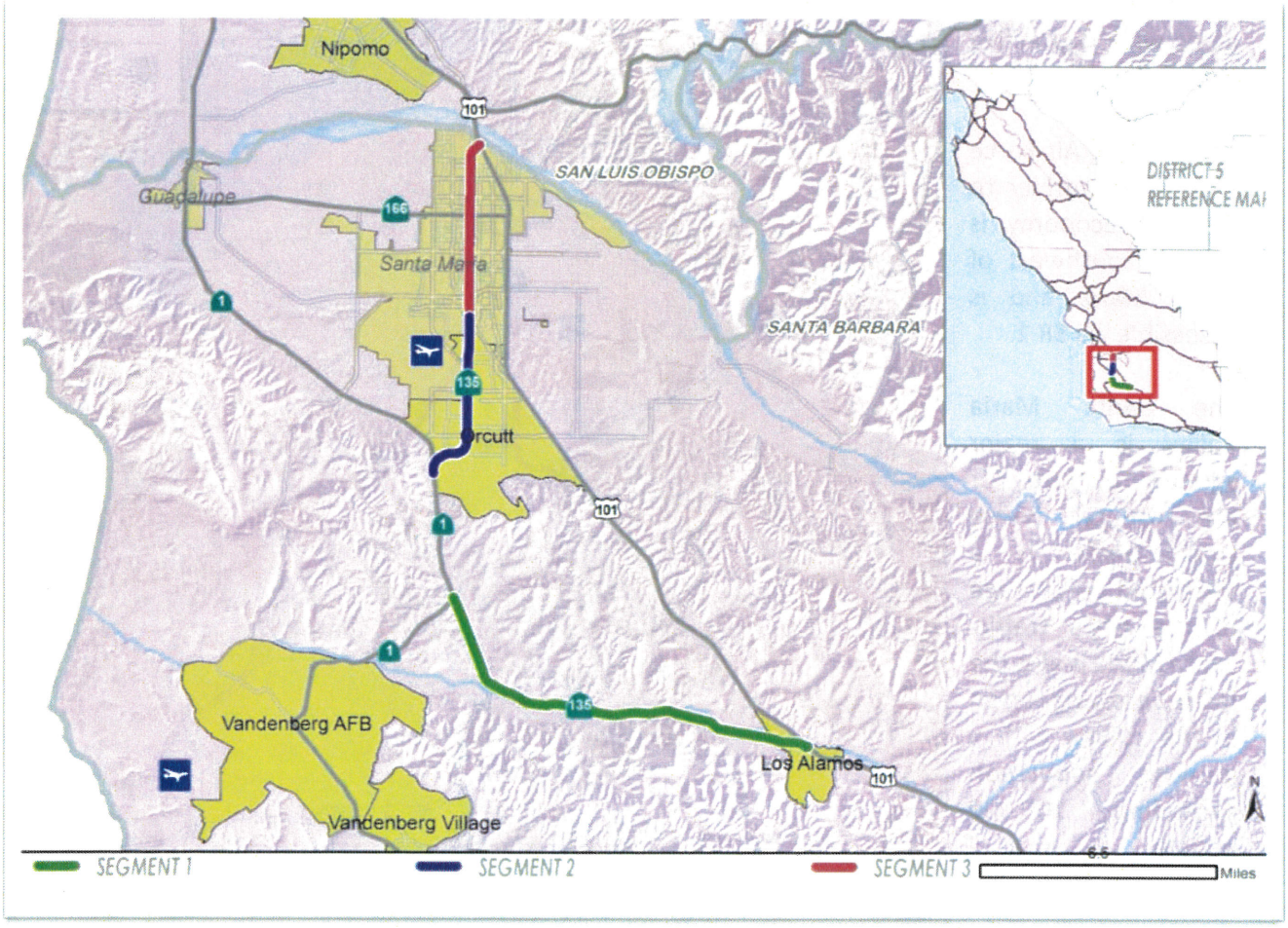

FIGURE 2.1 ROUTE SEGMENTATION

Segment	Location Description	County Route Beg. PM	County Route End PM	Existing Facility
1	From US 101 to SR 1 (south JCT)	0.00	M11.722	2-4 lanes- Major Collector
2	From SR 1 (North JCT) to Santa Maria Way	M11.722	13.00	4 lanes – Principal Arterial
3	From Santa Maria Way to US 101	13.00	17.806	4-6 lanes Principal Arterial

TABLE 2.1 ROUTE SEGMENTATION

Route Purpose:

SR 135 serves both local and regional traffic. The Santa Maria Valley is a major agricultural region supporting truck transportation, warehousing, farming and food manufacturing industries clustered along US 101, SR 135 and SR 166. In Santa Maria, freight is a significant part of this regions traffic.

Major Route Features:

SR 135 transitions between the rural setting of Los Alamos and Orcutt, and the urban setting of Santa Maria. In Santa Maria, SR 135 traverses through the downtown corridor and intersects with SR 166. Between Orcutt, Los Alamos and Santa Maria, SR 135 serves significant freight and regional traffic.

Santa Maria Airport, an important economic driver for the region is located to the northwest of SR 135. Santa Maria Airport encompasses approximately 2,598 acres with two active runways.

Vandenberg Air Force Base, a key driver to the local economy, is located southwest of Santa Maria and is accessible via SR 1.

The Santa Maria Valley is a major agricultural hub for the county, hence truck traffic is a significant percentage of the city's traffic. Santa Maria is also the fastest growing region in the county with a growing population exceeding 100,000 people.

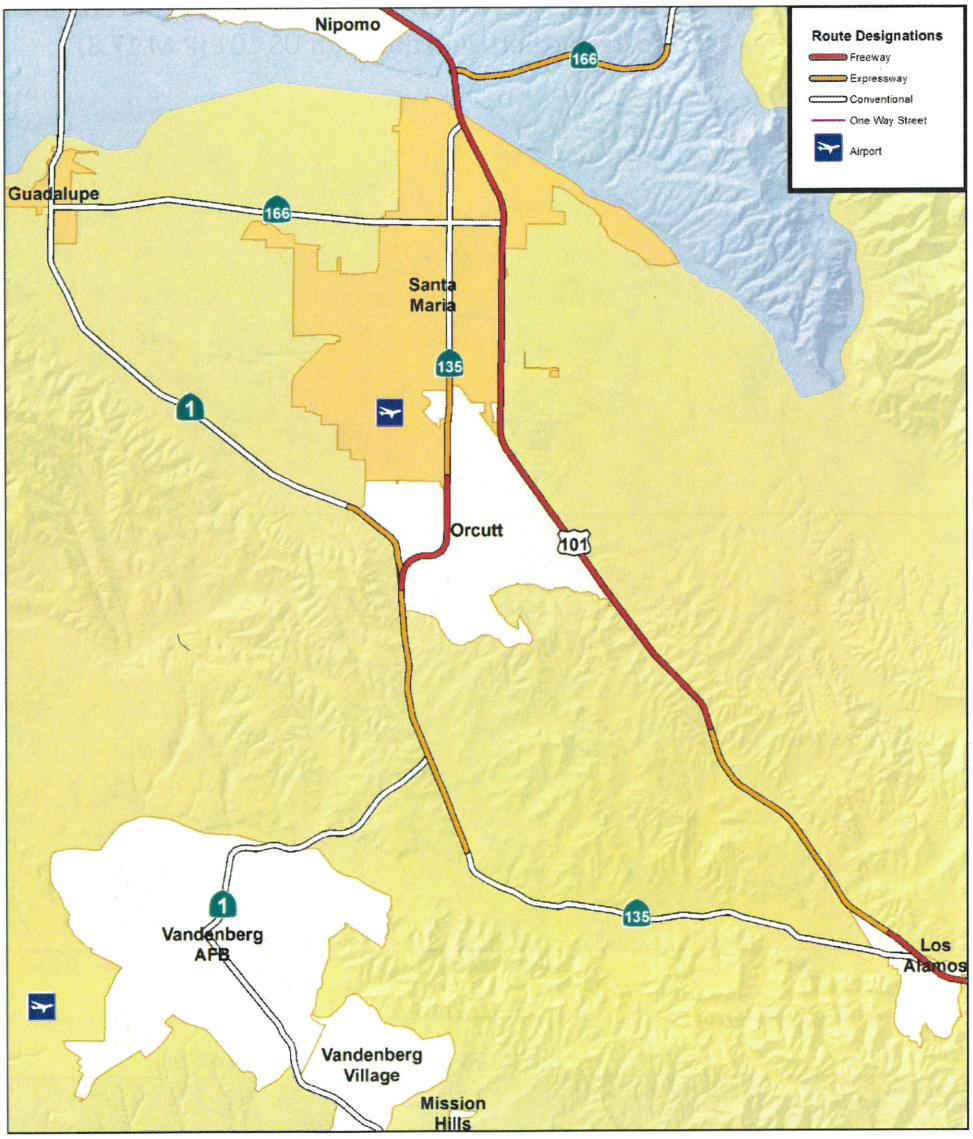

Figure 2.2: Route Designations

ROUTE DESIGNATIONS AND CHARACTERISTICS:

TABLE 2.3 ROUTE DESIGNATIONS AND CHARACTERISTICS

Segment #	1	2	3
Facility Type	Conventional/Expressway	Freeway/ Expressway	Conventional
National Highway System	No	STRAHNET Connector	No
Strategic Highway Network	No	No	No
Scenic Highway	No	No	No
Interregional Road System	No	Yes	No
Federal Functional Classification	Minor Collector	Principal Arterial	Principal Arterial
Goods Movement Route	No	No	No
Truck Designation	California Legal	Terminal Access	Terminal Access
Rural/Urban/Urbanized	Rural	Urban / Rural	Urban
Metropolitan Planning Organization	SBCAG	SBCAG	SBCAG
Regional Transportation Planning Agency	SBCAG	SBCAG	SBCAG
Congestion Management Agency	SBCAG	SBCAG	SBCAG
City	Los Alamos, Unincorporated	Orcutt, Unincorporated	Santa Maria
County	Santa Barbara County	Santa Barbara County	Santa Barbara County
Tribes	N/A	N/A	N/A
Air District	Santa Barbara County Air Pollution Control District (SBCAPCD)	Santa Barbara County Air Pollution Control District (SBCAPCD)	Santa Barbara County Air Pollution Control District (SBCAPCD)
Prevalent Land Use	Agriculture	Medium density residential	Urban Reserve

PAVEMENT CONDITION

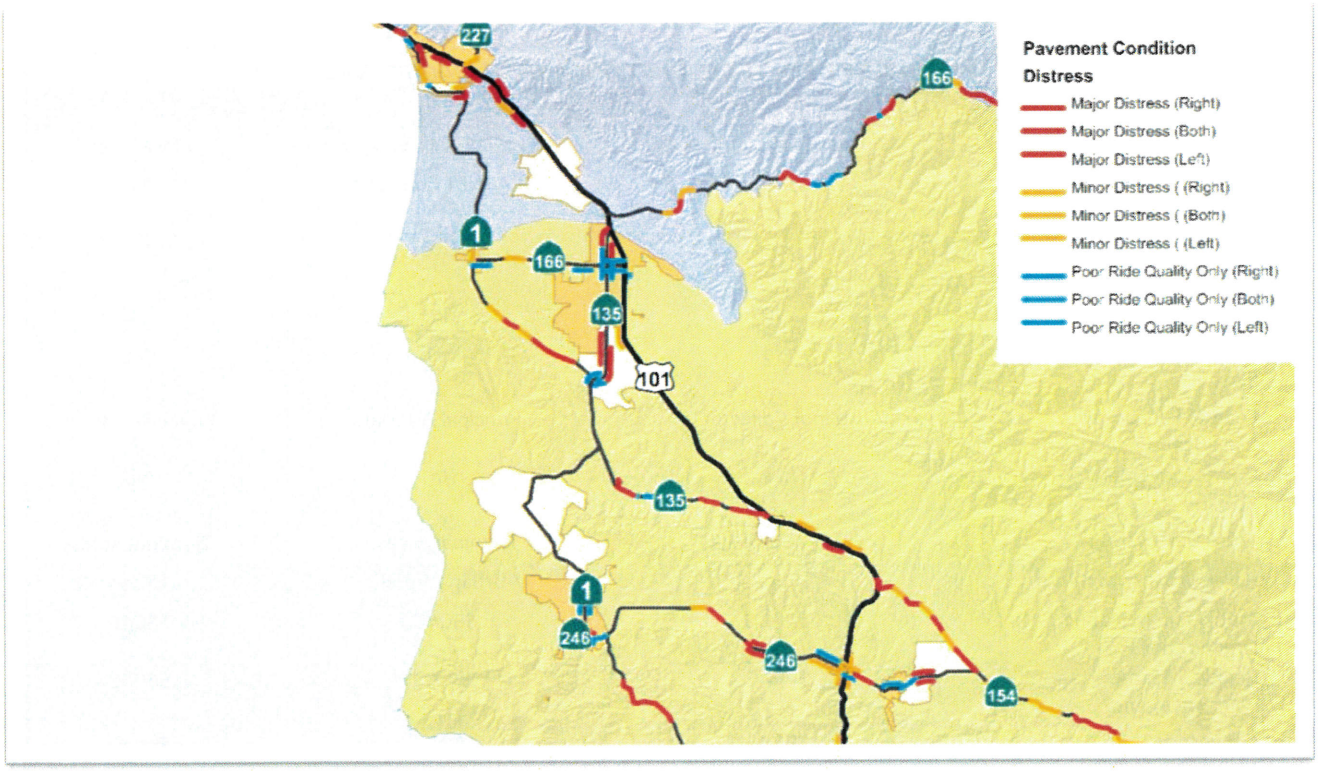

FIGURE 2.3 PAVEMENT CONDTION

COMMUNITY CHARACTERISTICS

SR 135 travels through the unincorporated towns of Los Alamos, Orcutt and the city of Santa Maria. Santa Maria is the largest and fastest growing city in Santa Barbara County. In comparison with Orcutt, Los Alamos and the county as a whole, the city residents have a lower median household income, a higher population below poverty level and lower education attainment according to the U.S. Census.

Santa Maria is home to large agriculture industries including farming, food manufacturing, and truck transportation and warehousing industry. Agriculture and Agriculture related industry are a big part of Santa Maria's economy. Santa Maria offers affordable housing options which attract many residents to relocate from neighboring regions. Big box retailers are prevalent throughout the city and attract shoppers from the counties of Santa Barbara and San Luis Obispo. Vandenberg Air Force Base, Santa Maria School District, Marian Regional Medical Center and Allan Hancock College are the top four employers in the area.

Los Alamos is a small unincorporated town with a population of 1,890. It is located at the intersection of US 101 and SR 135 near the Santa Ynez Valley in Santa Barbara County. It is located approximately 10 miles from Buellton, Solvang and Los Olivos to the southeast; and to the northwest is Guadalupe, Orcutt and Santa Maria. Los Alamos is mainly an agricultural region, with a surrounded landscape of rolling hills. Wine tasting, fine dining and antique stores attract many visitors to this town.

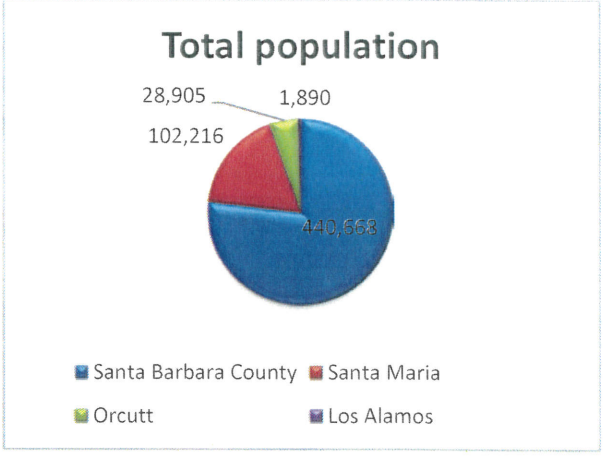

Chart 2.1: Population

TABLE 2.4 COMMUNITY CHARACTERISTICS

Community Characteristics				
	Santa Barbara County	Santa Maria	Orcutt	Los Alamos
Median household income	$62,779	$50,563	$69,179	$62,150
Persons below poverty level	16.0%	20.7%	6.5%	15.6%
Median Age	33.5	28.9	42.6	40.0
Educational Attainment: High school graduate or higher	79.1%	60.3%	90.5%	84.4%
Housing units	153,254	28,927	11,484	528
Foreign Born Population	99,927.0	34,739.0	2,907.0	252.0

According to 2010 U.S census, the county's population grew by 6% from 399,347 in 2000 to 423,895 in 2010. Furthermore, it is forecasted to grow by 19% to 523,529 in 2030 (SBCAG). Although, in 2010, the county's population increased by 6%, and 90% of the population growth came from the Santa Maria valley. Between 2000 and 2010, the Santa Maria valley had the largest population growth of 17% which accounted for an increase of 21,953 persons (U.S Census).

LAND USE

SR 135 traverse through downtown Santa Maria, Orcutt and Los Alamos. Santa Maria is an urbanized community dominated by a single family housing and big box commercial land use. This region is also home to large l farms and ranches. Santa Maria's downtown center features a traditional grid street system with wide streets. There are over 20 schools scattered along SR 135 and adjacent streets making SR 135 an important local and regional route. Santa Maria Airport located to the northwest of SR 135 and Vandenberg Air Force Base to the southwest of SR 135 are two important economic drivers for this region.

Orcutt is a bedroom community of Santa Maria and others commuting from or to Lompoc, Goleta and Santa Barbara. Orcutt is has predominately low-density single family housing and open space. Whereas, Los Alamos is a quiet community with fewer than 2000 residents. It is surrounded by agriculture, wine/grape vineyards and a few oil fields.

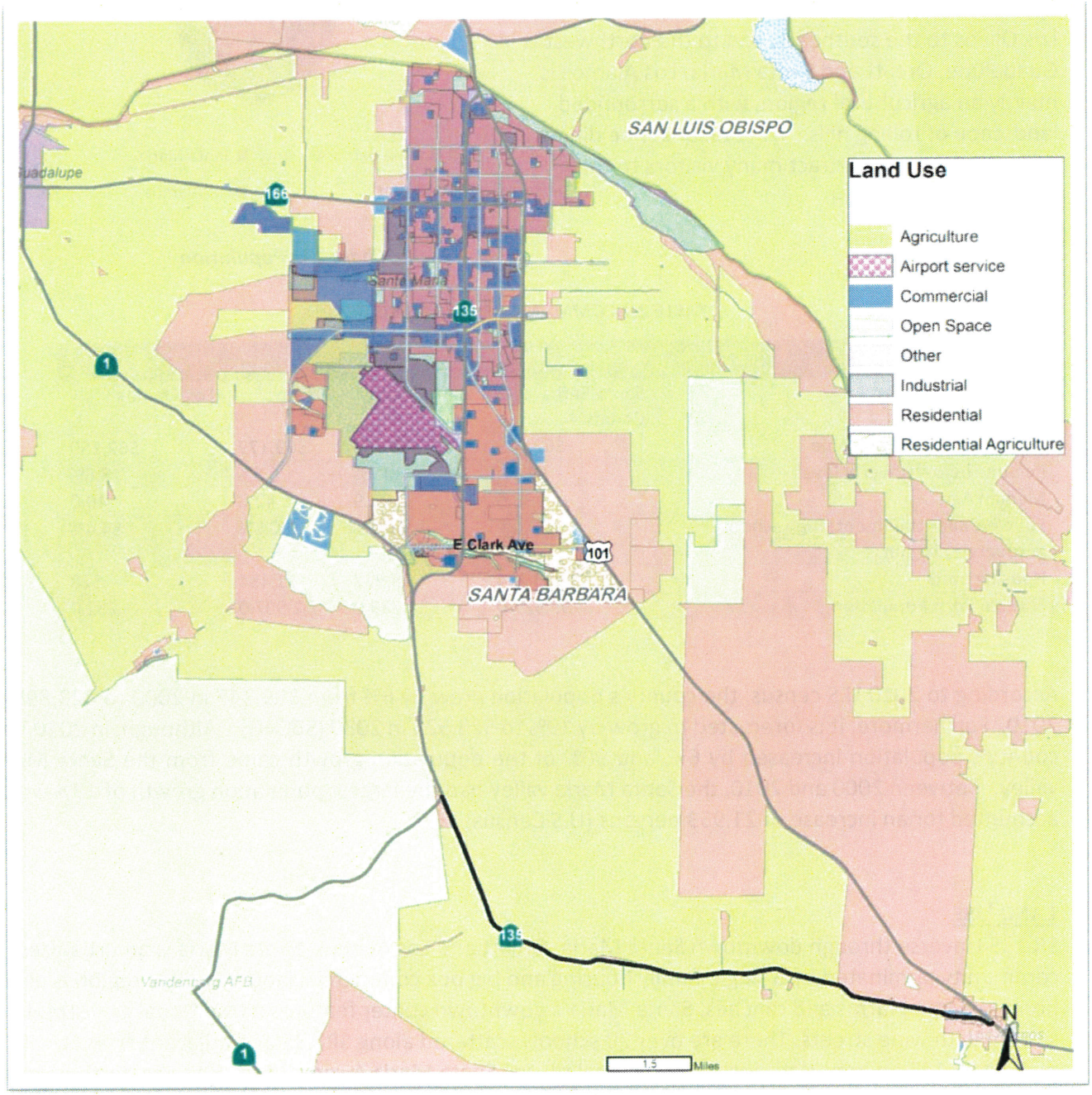

Figure 2.4 Land Use Map

FREIGHT

The top three agricultural products in Santa Barbara County are: Strawberries, wine grapes and broccoli (*Source Agricultural Production Report of Santa Barbara 2014).* Most of the food manufacturing plants and crop production facilities are clustered near downtown Santa Maria.

The major freight issues for this region include: lack of adequate overnight truck parking space in Los Alamos and Santa Maria area, congestion on SR 166 which crosses SR 135 in the downtown and urban neighborhood of the city of Santa Maria. In addition, the truck and local traffic on SR1 35 (Segment 2 & 3) combined with significant population growth in the Santa Maria region, make this challenging for freight movement.

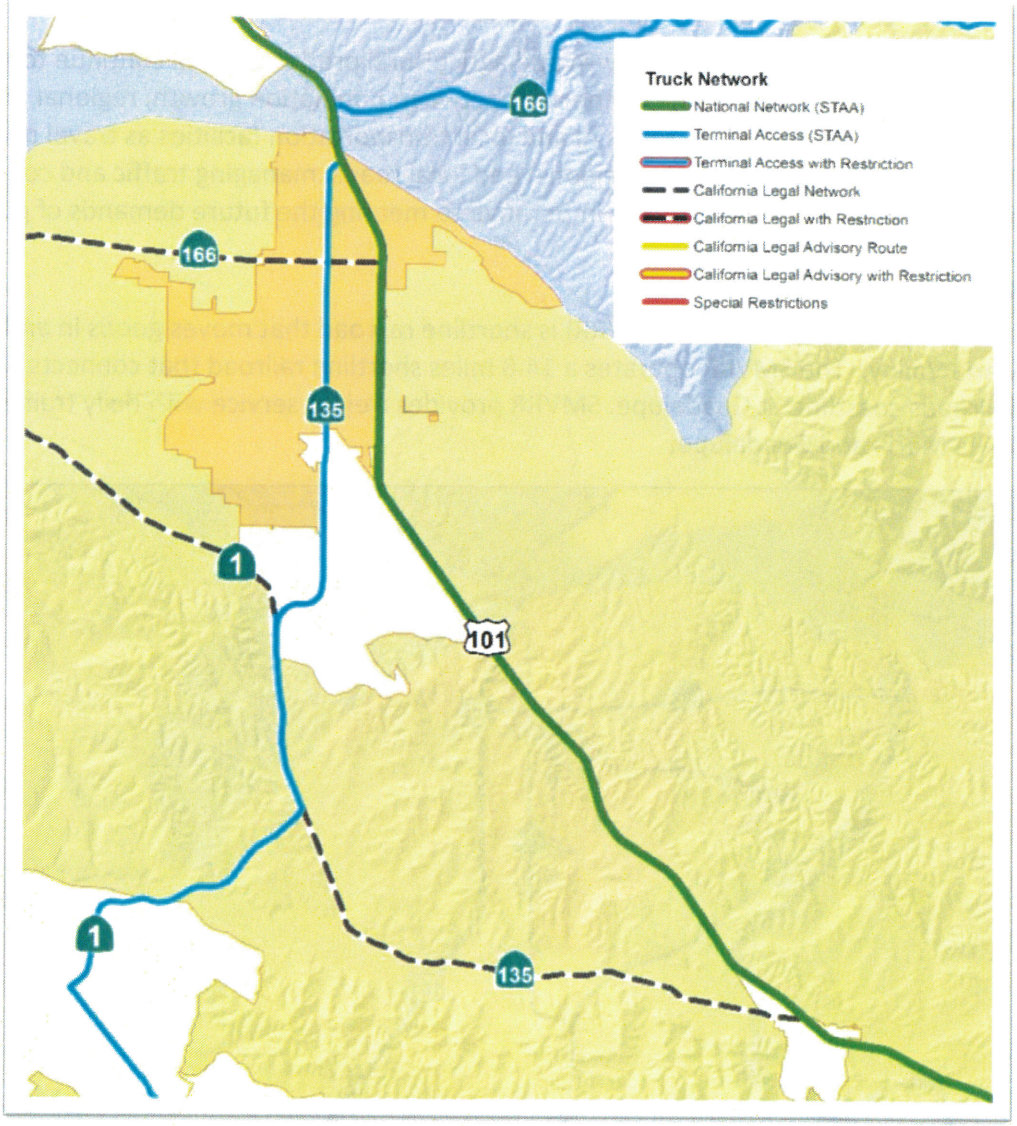

Figure 2.5 Truck Network

On Segment 1 and 2, truck volume ranges between 13% and 20%. The transportation of produce and goods from west of Santa Maria and Guadalupe via SR1 to SR 135, and merging to US 101 via Clark Ave is a plausible explanation for the high truck volume on segment 1 and 2.

In Los Alamos, Segment 1 is used heavily by freight with truck traffic ranging between 13% and 20%, but this segment also functions as a Main Street for the town of approximately 1900 people. Concerns expressed by the local community incudes: impaired mobility and accessibility in this area, the need for

traffic calming measures for large trucks traveling through downtown Los Alamos and the need for truck parking to decrease idling and pollutions, and the need to improve accessibility for all users of all abilities and ages.

Goods movement is critical to the overall health of the economy and jobs in this region. In addition to being able to harvest crops, the ability to store and transport farm goods, to and from the market place and other various locations is essential to the national, state and local economies.

Economic trends, population growth and agricultural production will continue to impact freight movement considerably. The connection between population growth, regional products and freight volumes will greatly impact regional and local transportation facilities as travel demand increases. Therefore, maintaining existing regional and local roads, managing traffic and congestion as well as other transportation facilities are imperative to meeting the future demands of goods movement.

RAILROAD

Santa Maria Valley Railroad (SMVRR) is shortline railroad that moves goods in and out of the Santa Maria Valley. The SMVRR operates a 14.8 miles shortline railroad that connects with the Union Pacific Railroads coastline at Guadalupe. SMVRR provides freight service with daily train service between Santa Maria and Guadalupe.

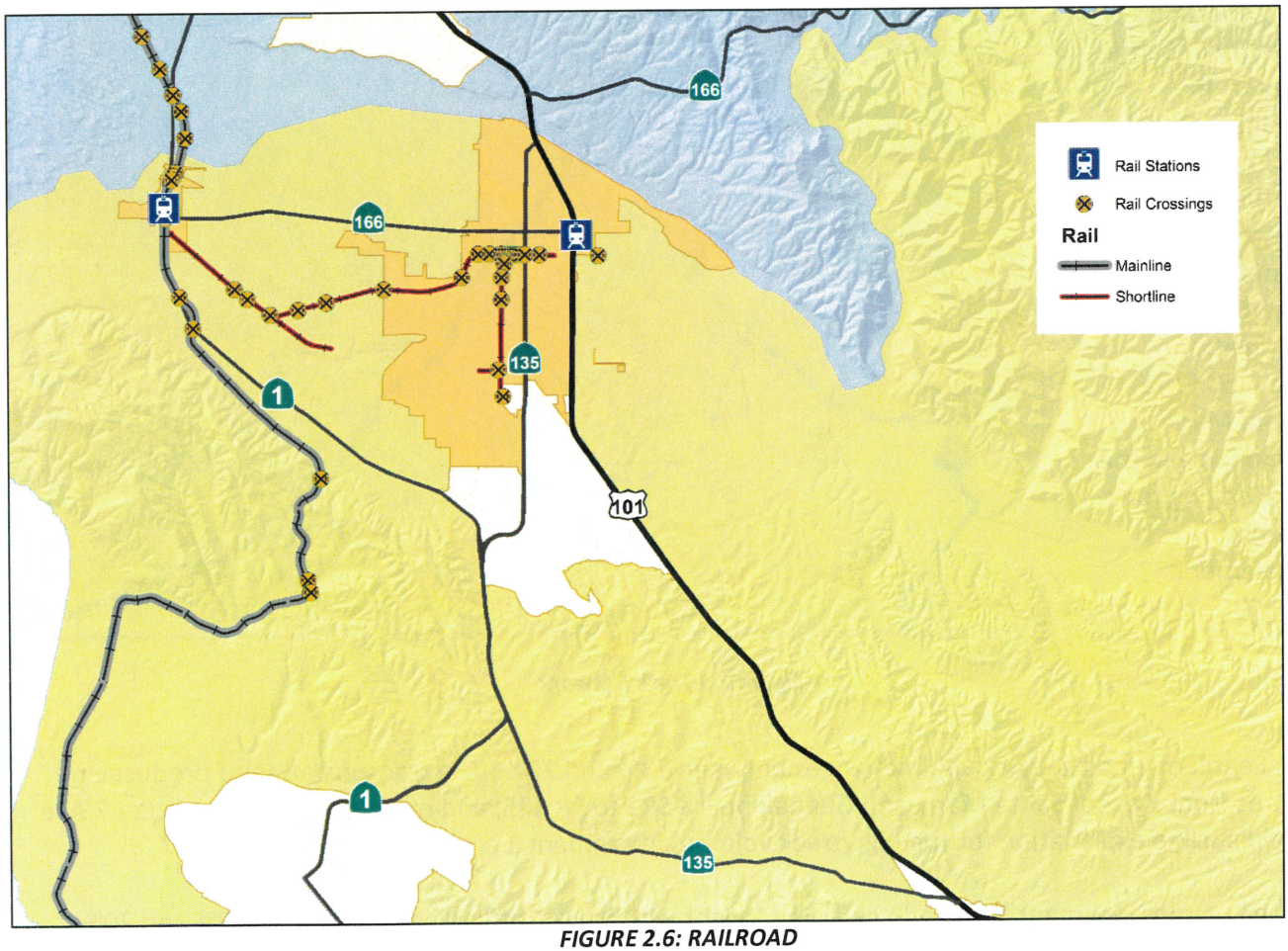

FIGURE 2.6: RAILROAD

Goods transported by rail includes frozen vegetables and strawberries, construction materials, lumber, steel, machinery and other goods. In Santa Maria, agricultural and related goods make up most of the goods transported by this mode. Transloading stations are located on Betteravia Street in Santa Maria, near SR 135. SMVRR. SMVRR crosses SR 135 and terminates near SR 135 and Jones Street.

BICYCLE FACILITY

Bicyclists use SR 135 both for recreational travel and commuting purpose.

The Santa Maria Bikeway Master Plan 2009 identifies planned bikeway and pedestrian improvements on SR 135 including Class III routes between Taylor Street and Donovan Rd, El Camino St and Morrison Ave. These improvements include signs and permanent marking for shared lane.

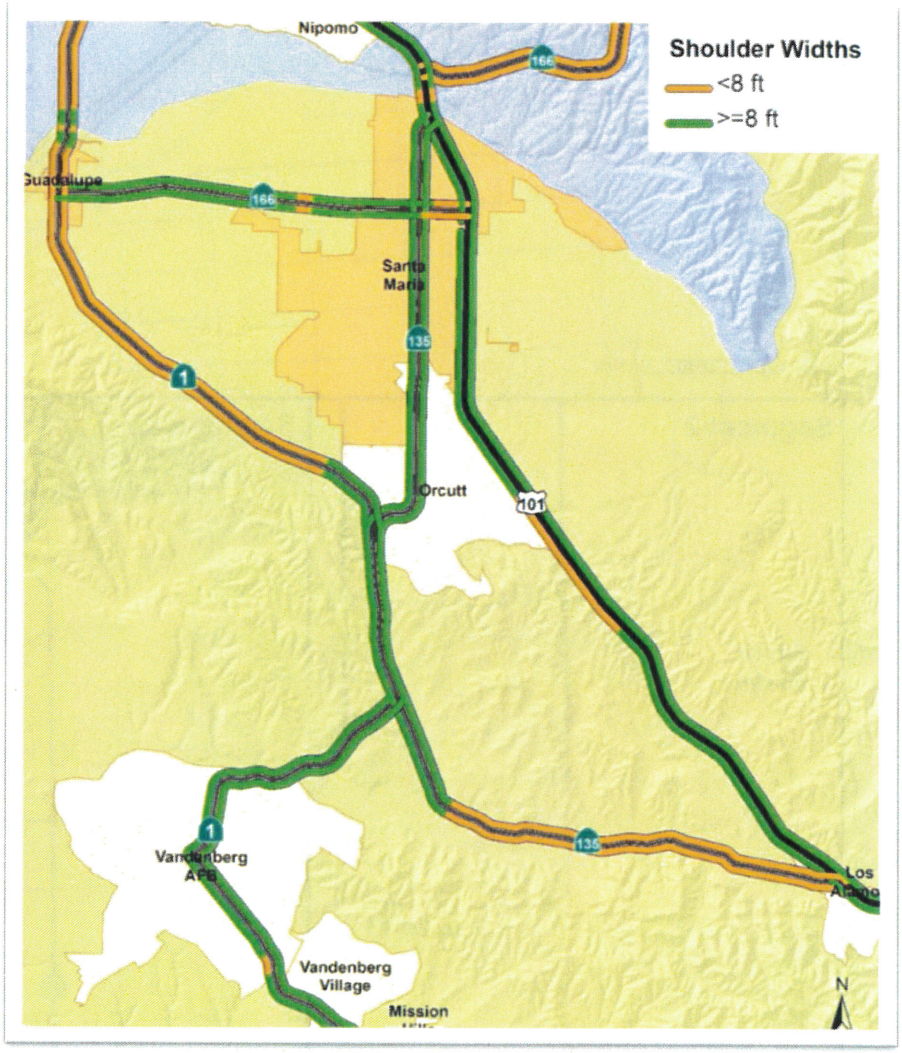

FIGURE 2.7: SHOULDER WIDTHS

For the most part, SR 135 has a road shoulder widths of eight feet or greater except on some section of Segment 1. On Segment 1, in Santa Barbara County, the roads are narrower and low in traffic in comparison to Segment 2 and 3. On this section of the route, cyclists ride on the road that has a narrow shoulder width. Widening the shoulders is an important consideration for future improvements.

In Los Alamos, Segment 1 becomes Bell Street and functions as a Main Street. Class II bike lanes are proposed on SR 135 in Los Alamos on both sides of the street from Den Street to the US 101/SR 135 interchange. The Los Alamos Pedestrian Circulation and parking plans 2015 identifies traffic calming and safety measures for pedestrian and bicyclists along Bell Street, and improvements to the US 101

undercrossing as the highest priority for this area. Actively working now in collaboration with the city of Santa Maria, SBCAG and the Santa Barbara County, Caltrans continues to participate in locally lead future bicycle and pedestrian planning efforts.

Segment 2 in Orcutt features the only Class II bike lane on SR 135 between Clark Ave. and Lakeview Drive

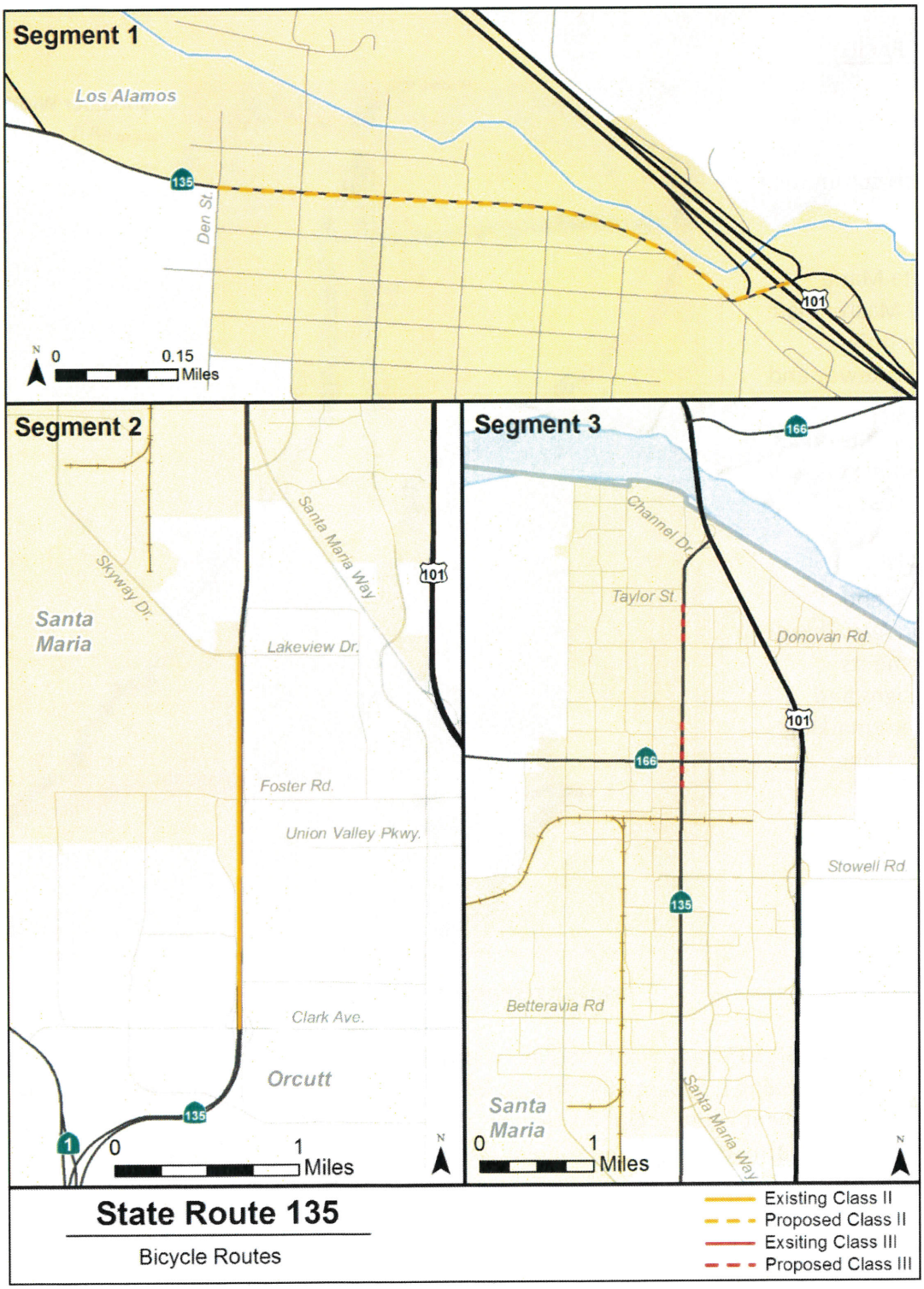

FIGURE 2:8 EXISTING AND PROPOSED BIKE ROUTE

TRANSIT FACILITY

In Santa Maria and Orcutt, Santa Maria Area Transit (SMAT) is the largest transit service provider. It provides fixed route service within the city of Santa Maria and Orcutt with 8 operating routes. SMAT Transit line 1, 2, 5, 6 and 7 use SR 135. In addition, the Breeze bus operated by SMAT provides limited transit services between Santa Maria, Vandenberg AFB, Lompoc, Los Alamos, Buellton, and Solvang. Transit line 61 and 62 utilizes SR 135. West of SR 135, the Guadalupe Flyer provides service between Guadalupe and Santa Maria; and north of SR 135, the SLO-RTA bus provides fixed route service between San Luis Obispo and Santa Maria. A Greyhound station located near SR 135 provides an interregional passenger bus service.

TABLE 2.7: TRANSIT SERVICE

Transit provider	Service area
Santa Maria Area Transit (SMAT)	City of Santa Maria and Orcutt
Breeze Bus	Santa Maria, VAFB, Lompoc, Los Alamos, Buellton and Solvang
ADA SMAT's service	City of Santa Maria and Orcutt
Clean Air Express	Santa Maria, Lompoc, Buellton, Solvang, Southern Santa Barbara
Guadalupe Flyer/shuttle	Guadalupe, Santa Maria
Los Alamos Shuttle	Los Alamos, Santa Maria
SLO-RTA Bus service	San Luis Obispo and Santa Maria

CHAPTER 4 CORRIDOR CONCEPT
CORRIDOR PERFORMANCE

This study analyzes performance for the SR 135 corridor in three segments. The following are evaluated for each segment:

- **System Characteristics**: Identifies the general characteristics of the route (more detailed information about system characteristics can be found in Appendix B).

- **System Operation:** Evaluates through regional traffic models and Caltrans historic data. For all segments, the base year Annual Average Daily Traffic is based on Caltrans historical data. Horizon year AADT projections were based on regional traffic model data.

- **Peak Hour Analysis:** Evaluates congestion during the PM Peak period as congestion is typically higher in that period than during the A.M peak travel time. Typically, traffic is heavy in the morning commute hours in both directions; and the same situation occurs in the opposite direction during the afternoon/evening commute hours.

SEGMENT 1: SANTA BARBARA COUNTY
SR 101 TO SR 1
(SB PM 0.000-M11.722)

System Characteristics
Segment 1 extends from US 101 in the small community of Los Alamos to SR 1 along the eastern border of Vandenberg Air Force Base. The majority of Segment 1 travels through flat rural farmland. Trucks make up 13.0% to 20.4% of total traffic along Segment 1.

System Operations
2012 Annual Average Daily Traffic (AADT) volume ranges from 1,500 to 3,500 vehicles per day (Table 5.1.1) along Segment 1. Historic AADT data indicates a general increase in volumes between 1992 and 2007 with some decrease in volumes between 2007 and 2012 (*Figure 5.1.1*). According to the SBCAG regional model (corrected with counts) volumes are not expected to grow, and they will have a range from 1,500 to 3,400 by 2040. Volumes are highest near US 101 and drop significantly as Segment 1 heads away from Los Alamos (*Figure 5.1.3*).

PM Peak Hour Data
In the base and horizon year, congestion is low. Demand reaches up to 25.5% of capacity. (Appendix B).

Bottlenecks
In both the base and horizon year there are no bottlenecks.

Table 5.1.1: Segment 1-Daily System Operations

AADT Base Year 2012	1,500 to 3,500
AADT Horizon Year 2040	1,500 to 3,400
AADT: Growth Rate (Vehicles/Year)	0
VMT Base Year 2012	23,500
VMT Horizon Year 2040	24,300

**2012 base year is established by Caltrans historic data and 2040 horizon year projections are based on the SBCAG regional traffic model.*

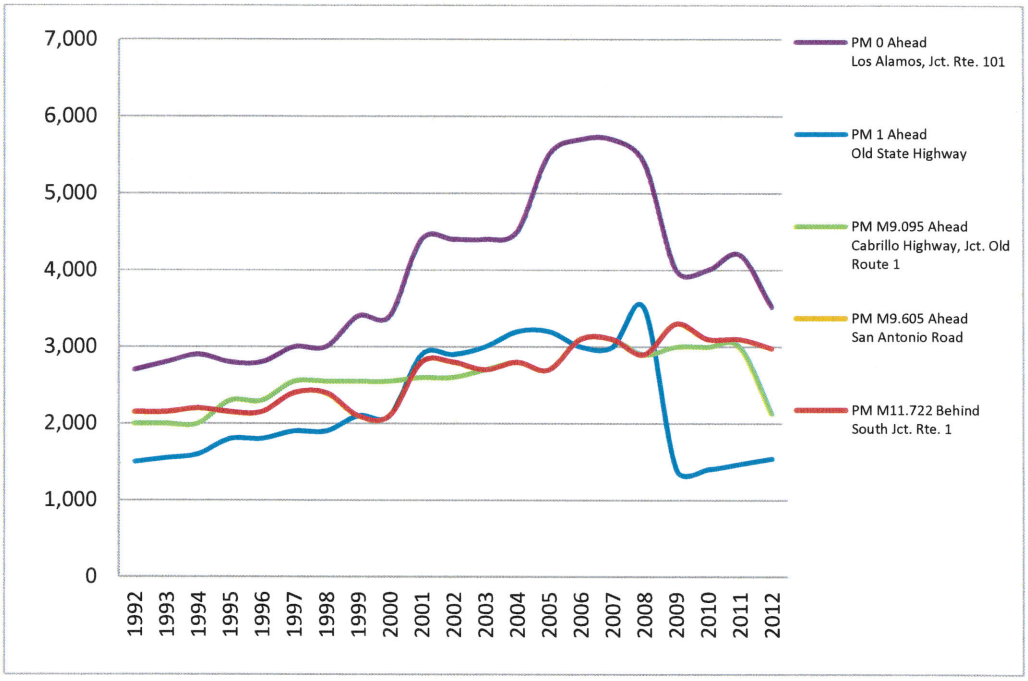

FIGURE 5.1.1: SEGMENT 1-HISTORICAL AADT BY YEAR

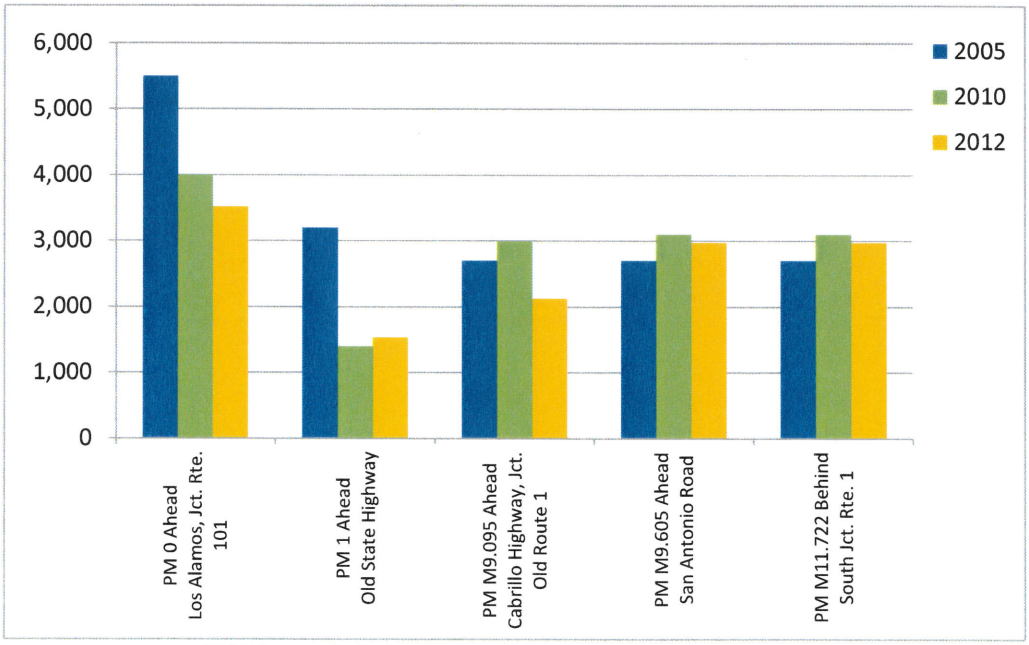

FIGURE 5.1.2: SEGMENT 1-HISTORICAL AADT BY LOCATION

Table 5.1.2: Segment 1-Peak Hour Traffic Data

	Northbound	Southbound
Segment Length (Miles)	11.708	
PM Peak Hour	5:00 - 6:00 PM	
PM Peak Hour Directional Split Base Year 2012	40.0% to 67.2%	32.8% to 60.0%
PM Peak Hour Directional Split Horizon Year 2040	38.1% to 63.1%	34.9% to 62.8%
PM Peak Hour Volume Base Year 2012	200 to 400	
	100 to 200	100 to 200
PM Peak Hour Volume Horizon Year 2040	100 to 300	
	100 to 200	100 to 200
PM Peak Hour Growth Rate (vehicles/year)	0	
PM Peak Hour VMT Base Year 2012	1,400	1,000
PM Peak Hour VMT Horizon Year 2040	1,400	1,100
PM Peak Hour Model VHT Base Year 2012	40	30
PM Peak Hour Model VHT Horizon Year 2040	40	30
PM Peak Hour V/C Base Year 2012	0.116 to 0.252	0.084 to 0.210
PM Peak Hour V/C Horizon Year 2040	0.111 to 0.255	0.086 to 0.210
PM Model Speed (mph) Base Year 2012	33.0 to 37.0 mph	32.9 to 37.9 mph
PM Model Speed (mph) Horizon Year 2040	33.0 to 37.0 mph	32.8 to 37.8 mph

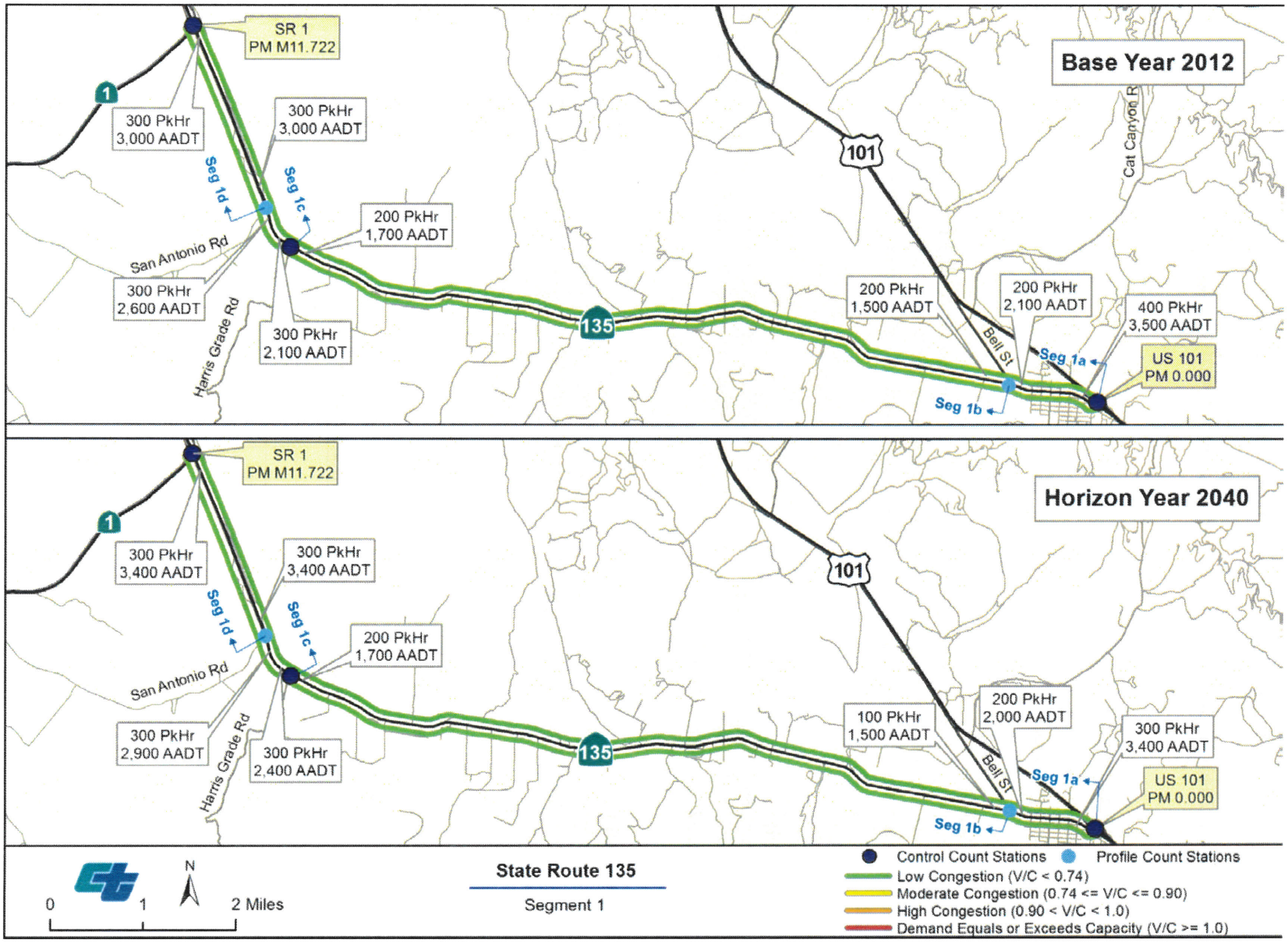

FIGURE 5.1.3: SEGMENT 1-BASE YEAR/ HORIZON YEAR CONGESTION

Segment 1 Corridor Performance Key Findings:

- Base Year (2012) conditions: Congestion is low throughout the corridor in both directions.
- Horizon Year (2040) conditions: Congestion remains low in both directions.

SEGMENT 2: SANTA BARBARA COUNTY
SR 1 TO SANTA MARIA WAY
(SB PM M11.722/13.000)

System Characteristics

Segment 2 extends from SR 1 along the eastern boundary of Vandenberg Air Force Base to Santa Maria Way in the City of Santa Maria. It traverses mostly a residential suburban environment. Truck traffic makes up 20.2% of total daily traffic along the southern section of Segment 2, but drops to 5 percent within the city boundaries of Santa Maria.

System Operations

2012 Annual Average Daily Traffic (AADT) volumes range from 3,000 to 22,600, and by 2040 are expected to increase to a range of 3,900 to 26,200 (Table 5.2.1). The highest AADT volume in 2012 is located along segment 2e with an AADT of 22,000 (Appendix B).

PM Peak Hour Data

In the base and horizon year, congestion is low in the southbound direction. Congestion is low in the northbound direction except for sub-segment 2d, which experiences moderate congestion. Conditions are reversed during the AM peak hour.

Bottlenecks

There are no bottlenecks in the base and horizon year.

Table 5.2.1: Segment 2-Daily System Operations

AADT Base Year 2012	3,000 to 22,600
AADT Horizon Year 2040	3,900 to 26,200
AADT: Growth Rate (Vehicles/Year)	30 to 200
VMT Base Year 2012	84,000
VMT Horizon Year 2040	93,800

**2012 base year is established by Caltrans historic data and 2040 horizon year projections are based on the SBCAG regional traffic model.*

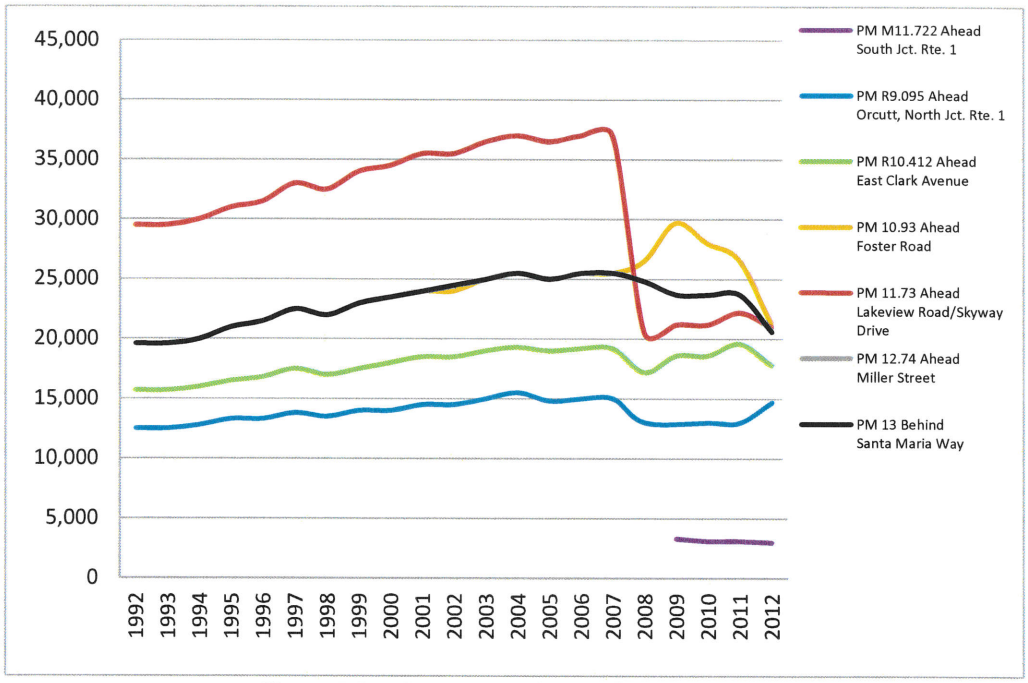

Figure 5.2.1: Segment 2-Historical AADT by Year

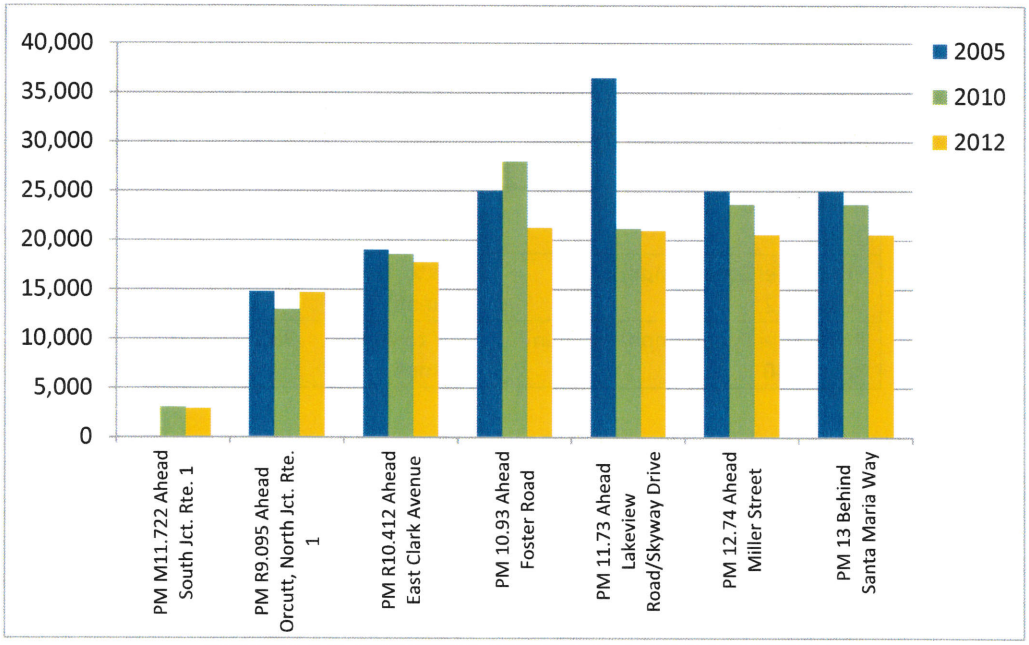

FIGURE 5.2.2: SEGMENT 2-HISTORICAL AADT BY LOCATION

Table 5.2.2: Segment 2-Traffic Data

	Northbound	Southbound
Segment Length (Miles)	4.845	
PM Peak Hour	5:00 - 6:00 PM	
PM Peak Hour Directional Split Base Year 2012	63.9%	36.1%
PM Peak Hour Directional Split Horizon Year 2040	63.1%	30.6%
PM Peak Hour Volume Base Year 2012	300 to 3,000	
	200 to 1,900	100 to 1,100
PM Peak Hour Volume Horizon Year 2040	300 to 3,200	
	200 to 2,000	100 to 1,200
PM Peak Hour Growth Rate (vehicles/year)	-2 to 15	
PM Peak Hour VMT Base Year 2012	6,100	3,400
PM Peak Hour VMT Horizon Year 2040	6,500	3,600
PM Peak Hour Model VHT Base Year 2012	150	90
PM Peak Hour Model VHT Horizon Year 2040	160	90
PM Peak Hour V/C Base Year 2012	0.065 to 0.767	0.037 to 0.433
PM Peak Hour V/C Horizon Year 2040	0.069 to 0.817	0.031 to 0.478
PM Model Speed (mph) Base Year 2012	39.3 to 49.0 mph	36.7 to 49.0 mph
PM Model Speed (mph) Horizon Year 2040	39.7 to 49.0 mph	38.1 to 49.0 mph

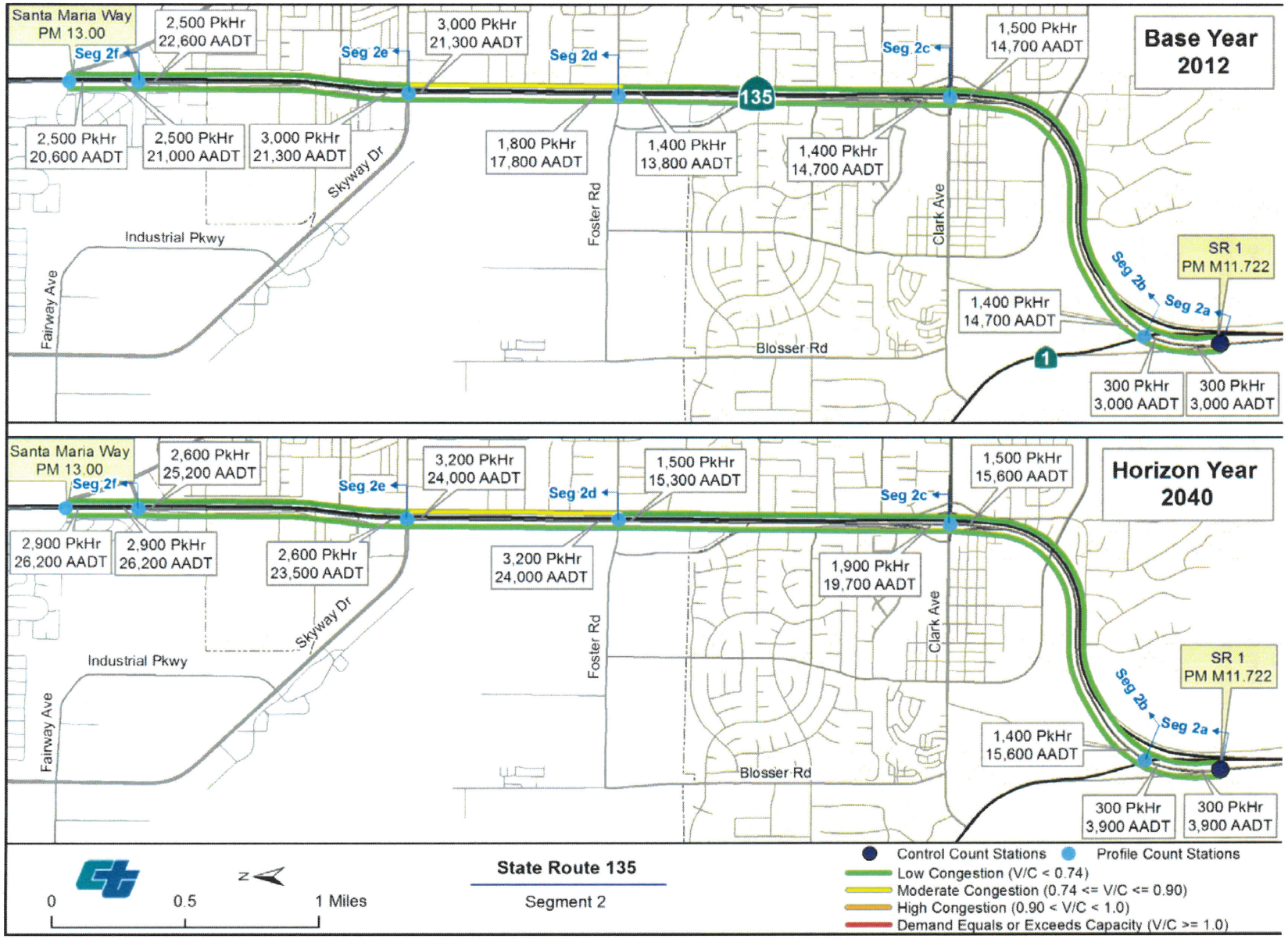

FIGURE 5.2.3: SEGMENT 2 - BASE AND HORIZON YEAR CONGESTION

Segment 2 Corridor Performance Key Findings:

- Base Year (2012) conditions: Congestion levels are low throughout the segment in the southbound direction, and are moderate in the northbound direction along sub-segment 2d.

- Horizon Year (2040) Conditions: Congestion levels are low throughout the segment in the southbound direction, and are moderate in the northbound direction along sub-segment 2d.

SEGMENT 3: SANTA BARBARA COUNTY
SANTA MARIA WAY TO SR 101
(SB PM 13.000 – 17.806)

System Characteristics

Segment 3 completes the northern section of SR 135. It traverses the city of Santa Maria's downtown corridor. Truck traffic accounts for 5.0% of total daily traffic. The SBCAG model was used to analyze Segment 3 macroscopically. Caltrans split data was used to determine northbound and southbound directional volumes. Because segment 3 is a highly accessed arterial with signalized intersections and complex moving patterns, a micro-simulation would be necessary to evaluate the level of service for individual intersections.

System Operations

In 2012, AADT volumes range from 17,900 to 31,100 and is expected to increase by 2040 to a range of 29,100 to 41,600 (*Table 5.3.1*). The highest AADT volume in 2012 is located just north of Betteravia Road with an AADT of 31,100 (Figure *5.3.3*).

PM Peak Hour Data

Congestion is low in both directions during the base year (*Figure 5.3.3*), except along segment 3c in the northbound direction and along segments 3c and 3d in the southbound direction, where congestion is moderate. During the horizon year, southbound traffic volumes exceed capacity in sub-segment 3d and congestion is moderate along sub-segment 3e. In the northbound direction, congestion is moderate in sub-segments 3a to 3c. Conditions are reversed in the AM peak hour.

Bottlenecks

PM peak hour bottlenecks occur in the horizon year between Donovan Road to SR 166, where demand exceeds capacity by 6%.

Table 5.3.1: Segment 3-Daily System Operations

AADT Base Year 2012	17,900 to 31,100
AADT Horizon Year 2040	29,100 to 41,600
AADT: Growth Rate (Vehicles/Year)	200 to 390
VMT Base Year 2012	120,000
VMT Horizon Year 2040	154,700

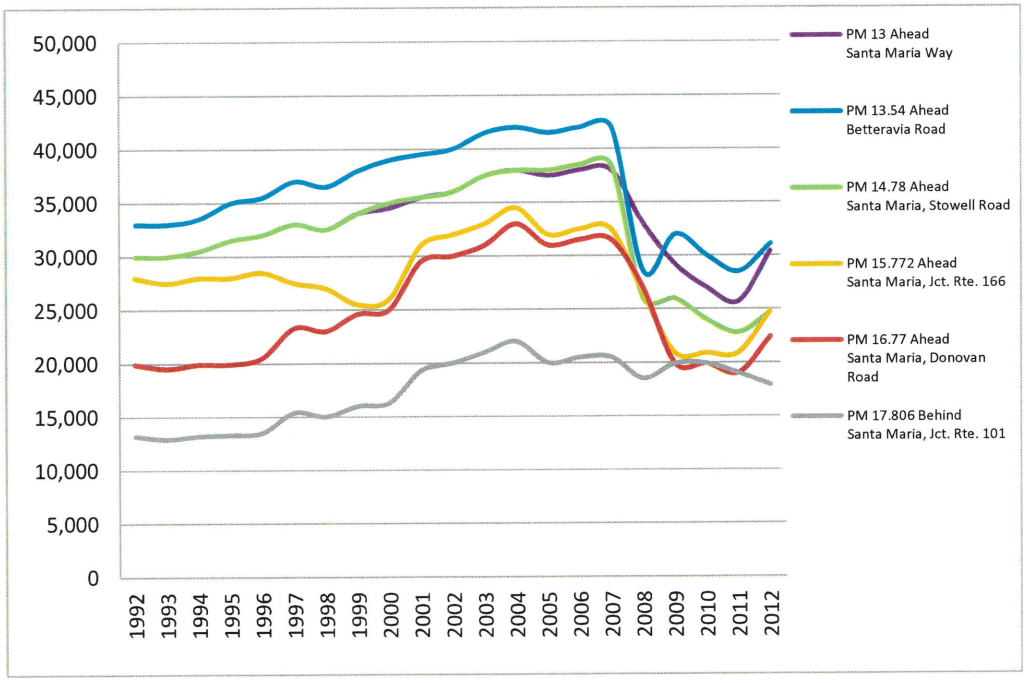

FIGURE 5.3.1: SEGMENT 3-HISTORICAL AADT BY YEAR

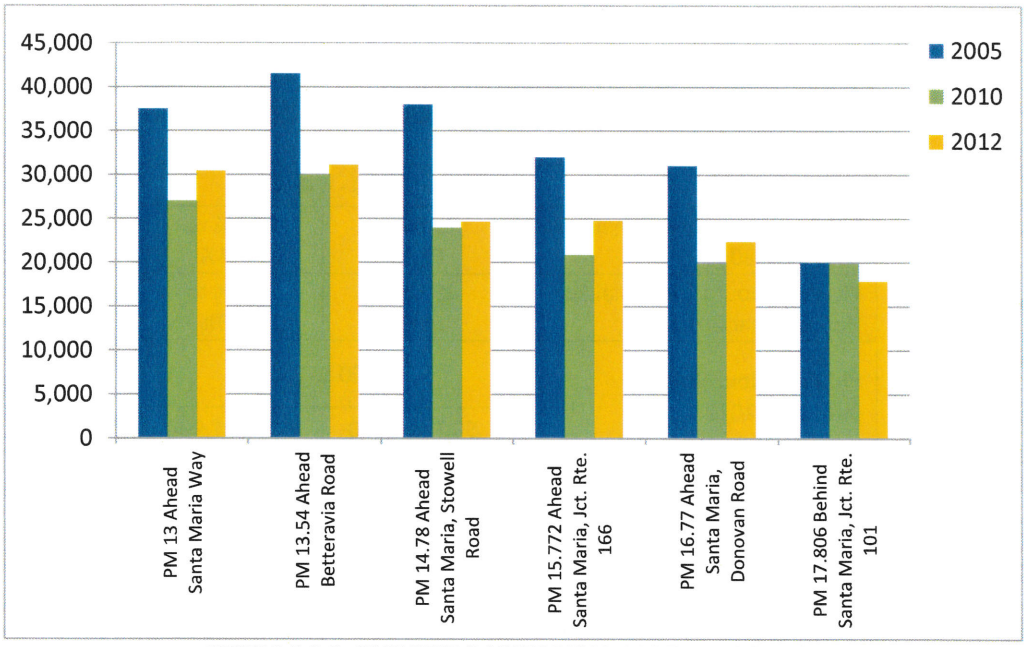

FIGURE 5.3.2: SEGMENT 3-HISTORICAL AADT BY LOCATION

Table 5.3.2: Segment 3-Traffic Data

	Northbound	Southbound
Segment Length (Miles)	4.806	
PM Peak Hour	5:00 - 6:00 PM	
PM Peak Hour Directional Split Base Year 2012	25.6% to 63.9%	36.1% to 74.4%
PM Peak Hour Directional Split Horizon Year 2040	25.5% to 65.3%	35.8% to 77.0%
PM Peak Hour Volume Base Year 2012	2,100 to 3,100	
	500 to 2,000	900 to 1,900
PM Peak Hour Volume Horizon Year 2040	2,500 to 3,900	
	700 to 2,500	1,100 to 2,300
PM Peak Hour Growth Rate (vehicles/year)	13 to 28	
PM Peak Hour VMT Base Year 2012	6,100	6,200
PM Peak Hour VMT Horizon Year 2040	7,300	7,700
PM Peak Hour Model VHT Base Year 2012	160	160
PM Peak Hour Model VHT Horizon Year 2040	190	200
PM Peak Hour V/C Base Year 2012	0.234 to 0.785	0.355 to 0.870
PM Peak Hour V/C Horizon Year 2040	0.292 to 0.864	0.445 to 1.059
PM Model Speed (mph) Base Year 2012	37.1 to 39.7 mph	37.5 to 40.0 mph
PM Model Speed (mph) Horizon Year 2040	36.2 to 39.2 mph	36.7 to 39.6 mph

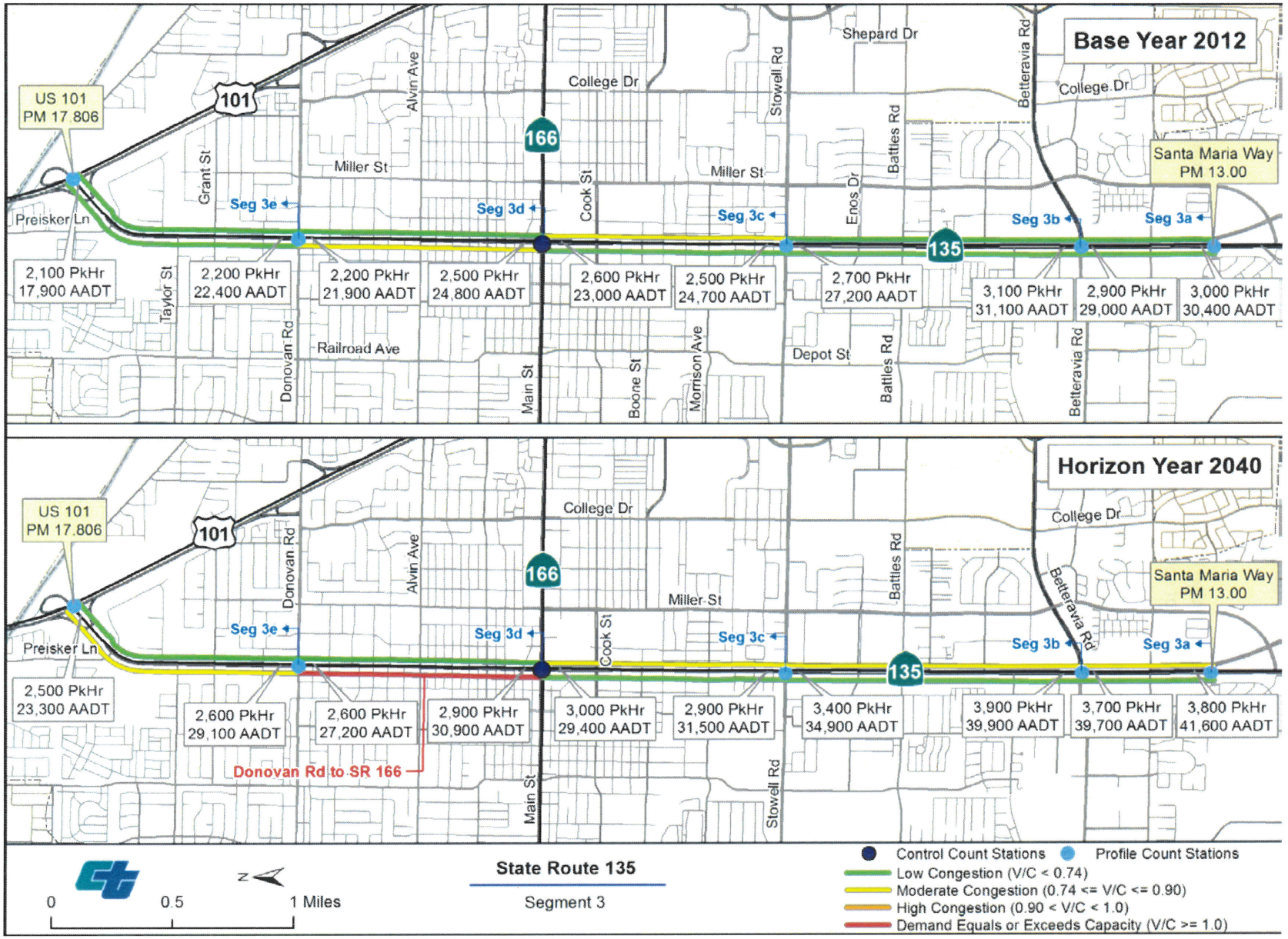

FIGURE 5.3.3: SEGMENT 3-BASE YEAR/HORIZON YEAR CONGESTION

Segment 3 Corridor Performance Key Findings:

- Base Year (2012) conditions: Congestion levels are moderate in the northbound direction of sub-segment 3c and in the southbound direction of sub-segment 3d.

- Horizon Year (2040) conditions: Southbound traffic volumes exceed capacity in sub-segment 3d, and congestion is moderate along sub-segment 3e. In the northbound direction, congestion is moderate in sub-segments 3a to 3c.

CHAPTER 5: CORRIDOR CONCEPT

CONCEPT RATIONALE

Overall, the Data shows that SR 135 will continue to operate at or under capacity through 2040. The only section that demand exceeds capacity by 2040 is on segment 3 during the PM peak hour between Donovan Road and SR 166. The corridor concept for SR 135 is to maintain a 2- lane conventional highway for the first 9.6 miles, a 4-lane freeway/expressway the next 7.1 miles and a 4 and 6 lane conventional highway for the remainder of its length.

Caltrans recommends a locally led and collaborated approach to multimodal improvements on SR 135 for bicyclist and pedestrian users.

TABLE 5.1: SR 135 CORRIDOR CONCEPT

CORRIDOR CONCEPT

- **Maintain existing facility**

Segment	Location Description	County Route Beg. PM	County Route End PM	Existing Facility
1	From U.S 101 to SR 1 (south JCT)	0.00	M11.722	Maintain 2-4 lanes Conventional/Expressway
2	From SR 1 (North JCT) to Santa Maria Way	M11.722	13.00	Maintain 4 lanes Conventional/Freeway
3	From Santa Maria Way to US 101	13.00	17.806	4-6 lanes Conventional highway

Multimodal and Operational Improvements

- Coordinate with the City of Santa Maria, the County of Santa Barbara and SBCAG to Improve bicycle and pedestrian facilities
- Work closely with local jurisdictions, transit agencies, regional and state agencies, and the community to develop cohesive plans for multimodal travel

Maintenance and Preservation

- Maintain and preserve pavement conditions throughout the route.

CORRIDOR PERFORMANCE KEY FINDINGS:

Segment 1 Corridor Performance Key Findings:

- Base Year (2012) conditions: Congestion is low throughout the corridor in both directions.
- Horizon Year (2040) conditions: Congestion remains low in both directions.
- In both the base and horizon year there are no bottlenecks.

Segment 2 Corridor Performance Key Findings:

- Base Year (2012) conditions: Congestion levels are low throughout the segment in the southbound direction, and are moderate in the northbound direction along sub-segment 2d.
- Horizon Year (2040) conditions: Congestion levels are low throughout the segment in the southbound direction, and are moderate in the northbound direction along sub-segment 2d.
- There are no bottlenecks in the base and horizon year.

Segment 3 Corridor Performance Key Findings:

- Base Year (2012) conditions: Congestion levels are moderate in the northbound direction of sub-segment 3c and in the southbound direction of sub-segment 3d.
- Horizon Year (2040) conditions: Southbound traffic volumes exceed capacity in sub-segment 3d, and congestion is moderate along sub-segment 3e. In the northbound direction, congestion is moderate in sub-segments 3a to 3c.
- PM peak hour bottlenecks occur in the horizon year between Donovan Rd to SR 166, where demand exceeds capacity by 6%.

PLANNED AND PROGRAMMED PROJECTS AND STRATEGIES

TABLE 5.2: PLANNED PROJECTS

Seg.	Description	Planned or Programmed	Location	Source	Purpose	Implementation Phase
2	Reconstruct SR 135 Interchange with US 101 adjacent to the Santa Maria River Bridge to improve safety for merging vehicles and accommodate six- lanes widening on US 101	Planned	US 101 /SR 135	SHOPP/DSMP	System Management	Long Term
2	Pavement Restoration in Santa Maria from Lakeview to JCT US 101/ SR135	Planned	JCT US 101/ SR135	SHOPP/DSMP	System Preservation	Long Term
1	Minor A CAPM pavement preservation project in Los Alamos	Programed	JCT US 101/135 to Den street	SHOPP	System Preservation	Near Term

RESOURCES

LIST OF PREPARERS

Larry Newland- Senior Transportation Planner
Twenty-one years of experience in preparing system planning documents and environmental documents for CEQA/NEPA. Lead supervisor responsible for supervision and oversight of the TCR.

Espino, Claudia – PE Senior Transportation Engineer
Seventeen years of experience in Project Development in addition to nine years in Advanced Planning and Technical Support. Responsibilities include overseeing the technical input of this TCR.

Hana Mengsteab- Associate Transportation Planner
Three years of experience in regional planning. Responsible for overall preparation and development of the TCR.

Berkman, Jeff - Transportation Modeler
Ten years of experience in transportation demand modeling. Responsible for analyzing existing and future traffic conditions in Chapter 5.

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